DBMS LAB
Exp-12

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CSE-BD Sec-I2

Topic-PL/SQL (Exception Handling)

Aim: To implement PL/SQL Exception Handling

CODE-

```
SQL> create table customers(
  2  id int not NULL,
  3  name varchar(20) not NULL,
  4  age int not NULL,
  5  address char(25),
  6  salary decimal(18,2),
  7  primary key(id)
  8  );

Table created.

SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)  VALUES (1, 'Ramesh', 32, 'Ahmedabad', 2000.00 );

1 row created.
```

```
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)  VALUES (2, 'Khilan', 25, 'Delhi', 1500.00 );

1 row created.

SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES (3, 'kaushik', 23, 'Kota', 2000.00 );

1 row created.

SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY)  VALUES (4, 'Chaitali', 25, 'Mumbai', 6500.00 );

1 row created.

SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES (5, 'Hardik', 27, 'Bhopal', 8500.00 );

1 row created.
```

```
SQL> INSERT INTO CUSTOMERS (ID,NAME,AGE,ADDRESS,SALARY) VALUES (6, 'Komal', 22, 'MP', 4500.00 );

1 row created.
```

```
SQL> SELECT * FROM Customers;

        ID NAME                      AGE ADDRESS                       SALARY
---------- -------------------- ---------- ------------------------- ----------
         1 Ramesh                       32 Ahmedabad                       2000
         2 Khilan                       25 Delhi                           1500
         3 kaushik                      23 Kota                            2000
         4 Chaitali                     25 Mumbai                          6500
         5 Hardik                       27 Bhopal                          8500
         6 Komal                        22 MP                              4500

6 rows selected.
```

OUTPUT –

i)When correct customer id is given

```
SQL> DECLARE
   c_id customers.id%type := &cc_id;
   c_name customerS.Name%type;
   c_addr customers.address%type;
   -- user defined exception
   ex_invalid_id  EXCEPTION;
BEGIN
   IF c_id <= 0 THEN
      RAISE ex_invalid_id;
   ELSE
      SELECT  name, address INTO  c_name, c_addr
      FROM customers
      WHERE id = c_id;
      DBMS_OUTPUT.PUT_LINE ('Name: '||  c_name);
      DBMS_OUTPUT.PUT_LINE ('Address: ' || c_addr);
   END IF;

EXCEPTION
   WHEN ex_invalid_id THEN
      dbms_output.put_line('ID must be greater than zero!');
   WHEN no_data_found THEN
      dbms_output.put_line('No such customer!');
   WHEN others THEN
      dbms_output.put_line('Error!');
END;
/  2    3    4    5    6    7    8    9   10   11   12   13
Enter value for cc_id: 5
old   2:    c_id customers.id%type := &cc_id;
new   2:    c_id customers.id%type := 5;
Name: Hardik
Address: Bhopal

PL/SQL procedure successfully completed.
```

ii)When customer id is less than zero

```
SQL> DECLARE
   c_id customers.id%type := &cc_id;
   c_name customerS.Name%type;
   c_addr customers.address%type;
   -- user defined exception
   ex_invalid_id  EXCEPTION;
BEGIN
   IF c_id <= 0 THEN
      RAISE ex_invalid_id;
   ELSE
      SELECT  name, address INTO  c_name, c_addr
      FROM customers
      WHERE id = c_id;
      DBMS_OUTPUT.PUT_LINE ('Name: '||  c_name);
      DBMS_OUTPUT.PUT_LINE ('Address: ' || c_addr);
   END IF;

EXCEPTION
   WHEN ex_invalid_id THEN
      dbms_output.put_line('ID must be greater than zero!');
   WHEN no_data_found THEN
      dbms_output.put_line('No such customer!');
   WHEN others THEN
      dbms_output.put_line('Error!');
END;
/  2    3    4    5    6    7    8    9   10   11   12   13
Enter value for cc_id: -6
old   2:    c_id customers.id%type := &cc_id;
new   2:    c_id customers.id%type := -6;
ID must be greater than zero!

PL/SQL procedure successfully completed.
```

iii)When customer id doesn't exist

```
SQL> DECLARE
   c_id customers.id%type := &cc_id;
   c_name customerS.Name%type;
   c_addr customers.address%type;
   -- user defined exception
   ex_invalid_id  EXCEPTION;
BEGIN
   IF c_id <= 0 THEN
      RAISE ex_invalid_id;
   ELSE
      SELECT  name, address INTO  c_name, c_addr
      FROM customers
      WHERE id = c_id;
      DBMS_OUTPUT.PUT_LINE ('Name: '||  c_name);
      DBMS_OUTPUT.PUT_LINE ('Address: ' || c_addr);
   END IF;

EXCEPTION
   WHEN ex_invalid_id THEN
      dbms_output.put_line('ID must be greater than zero!');
   WHEN no_data_found THEN
      dbms_output.put_line('No such customer!');
   WHEN others THEN
      dbms_output.put_line('Error!');
END;
/  2    3    4    5    6    7    8    9   10   11   12   13
Enter value for cc_id: 8
old   2:    c_id customers.id%type := &cc_id;
new   2:    c_id customers.id%type := 8;
No such customer!

PL/SQL procedure successfully completed.
```

RESULT –

Hence we have successfully implemented PL/SQL Exception Handling.